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Ectopic Pregnancy in the Later Months.[1]

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THE treatment of extra-uterine pregnancy in the earlier months is no longer a vexed question. So little has been accomplished by either medicine or electricity, that the laity, as well as the great bulk of the profession, has come to regard cœliotomy, and total removal of the gestation sac, as the surest and safest treatment.

Electricity, especially in cases of doubtful diagnosis, and in districts remote from skilled operators, has its advocates, and very properly so, as much less harm will be accomplished by its use, than by unskillful surgery, in an unsafe environment. No doubt exists in any well-informed mind as to the advisability of the radical operation in all ruptures of the gestation sac, even in the desperate cases. To wait for reaction while internal hæmorrhage is exhausting vitality, and resorting to opium and stimulants, is no longer practiced by intelligent men. The folly of this worse than inaction has had such a ghastly array of fatal results, that it would take a brave man to counsel delay.

But the case is different when ectopic pregnancy has passed beyond the fifth month, and the child is known to be viable.

The possibility of favorable development and the final removal of a live child greatly complicates the situation, and the question may, and often does, assume ethical and theological aspects, which may possibly never be definitely settled. Where these considerations embarrass an already difficult surgical indication, the solution of the problem will ever remain more difficult than where simply doctors disagree. If it were certain that this developement would proceed without accident, after the ectopic pregnancy had passed the rubicon of the first half of gestation, there would be little doubt of the wisdom of delay, but the possibilities are so great of a suddenly fatal termination, that no dependence can be placed in this doctrine of chance, which amounts to worse than gambling with human lives entrusted to our care. Unfortunately for the child, we can only

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be reasonably sure of the present moment, so far as our patients are concerned, and I am glad see the brightening indications that point toward the same opinion which the profession has reached in regard to placenta prævia.

Few well-informed men live in this age who do not believe that the woman's only safety lies in the complete evacuation of her uterus at the earliest possible moment when the placenta is prævia, after a diagnosis has been made.

The roads marked "delay," "leave to nature," and "expectant treatment," are so filled with tombstones, bereaved relatives and friends, that the deluded and timid advocates of these delusive and fatal practices find little room to navigate their lonely way.

Medicine not being an exact science, we are unable to promise favorable results in all cases, but with the recent wonderful advancements of abdominal surgery, we can do much more than our fathers could to save human life, even when threatened by the dangers of advanced ectopic pregnancy.

The great difficulty in dealing with the placenta has deterred many from operating until two or three months after the child was known to be dead, and the placental vessels are so certainly atrophied as to avoid the danger of hæmorrhage. Even in these cases the doctrine of chance has not a few advocates. Some women have lived many years with a mummified fœtus, and have finally died of something else. Others have survived the results of decomposition, abscess and discharge of fœtal bones through bladder, vagina, rectum and abdominal wall, and why cannot more women survive these dangers? But the statistics of Shauta clearly show that many have died from the immediate effects of visceral perforation, or from the exhaustion resulting from ulceration and discharge, or remained permanent invalids.

The chief object of this paper is to recommend the removal of an extra-uterine fœtus in all cases as soon as the diagnosis is made, and the gestation sac and placenta whenever possible, whether it be the second, fourth, seventh or ninth month. If the child can be saved victory is still greater.

As in placenta prævia, the dangers increase with the developement of the placenta. The greater surface to bleed the more the danger from hæmorrhage. In some cases it may turn out to be safest to follow standard authority, and leave the placenta undisturbed, with its tied cord protruding from the lower end of the wound, and subsequently remove it after its circulation has dried up; or if no sepsis occurs, it may be left to come away piece-meal, or become encysted and absorbed, as occurred in two cases reported by Lawson Tait.

In May of this year Lusk reported thirteen cases, including one of his own, where cœliotomy had been performed with the fœtus living, in the second half of ectopic pregnancy, viz.: to those of Breisky, Brown, Eastman, Jessup, Rein, Lazarewitsch, Lusk, Martin, Olshausen, Shauta, Taylor, Treub and John Williams. A study of these pioneer cases and their careful analysis by Lusk shows that in the evolution of this operation we are already getting beyond the realm of chance in dealing with the placenta, and are successfully attacking

its entrenchments in the rear by enucleation and ligation of its vessels beyond the placenta, the general ooze from the united small vessels and torn surfaces being compressed by packing with iodoform gauze after the separation and delivery of the after-birth.

Lusk saved his patient by vigorously compressing the abdominal aorta while completing the placental separation and a final packing of gauze in a Mikulicz pouch.

Jessup and Taylor left the placenta untouched, with cord hanging out the lower angle of the closed abdominal incisions. In Jessup's case the putrescent placenta was two months and a half in discharging itself and curing the patient.

In Taylor's, the abdomen had to be reopened on the twelfth day on account of the gangrenous condition of the cord and symptoms of septicæmia.

The hæmorrhage following the separation of the after-birth "was with difficulty controlled by the pressure of a large sponge, wetted with a dilute solution of perchloride of iron." It took her three and a half months to get "quite well."

Lusk says: "Both these cases belong to the domain of miracle, and do not invite imitation."

Olshausen, by tying the vessels in the broad ligament beneath the placenta, was able to remove it completely without hæmorrhage.

Fernwald found the placenta attached not only in the folds of the broad ligament, but to the under side of the uterus. He tied the vessels in the ligament, and clamped and removed the portion of the uterus which bled; a few stitches and some iodoform gauze saved the day. The patient was discharged cured in two days more than two months.

John Williams' and Treub's cases did not vary much from Jessup's and Taylor's.

Martin first deliberately and intentionally tied the vessels beneath the placenta and by the side of the uterus in the seventh month of ectopic pregnancy, and removed this organ without loss of blood. He closed the sac above and drained through an opening below, punched through the cul-de-sac into the vagina.

Breisky and Eastman both operated successfully in the eighth month, removing the entire ovum. They ligated the vessels under the placenta. Eastman "was able to clamp the uterine end of the tube and the broad ligament, and to cut away the portion which contained the ovum."

In February, 1890, Professor Rein, of Kiew, successfully enucleated from the peritoneum an eight-months' fœtus, with placenta and membranes, in the same manner as we enucleate an intra-ligamentous ovarian tumor.

It will be seen by the foregoing evidence, that as in ovariotomy, hysterectomy and appendicitis, this operation is undergoing the various stages of evolution, resulting finally in the saving of more than a dozen women and a number of children. We are in a position at least to say, that women far advanced in ectopic pregnancy need not be left without surgical operation outstretched to help them and their worse than unborn children; and on the theory that "what man has done, man may do," we can now advise, with a clearing conscience, cœliotomy and complete removal of the fœtus, placenta and membranes.

Though a large majority of these operations have been done abroad, Eastman and Lusk have added lustre to the already bright reputation of American surgery by their brilliant operations. There is much ground for the hope and belief that Pan-American surgeons may equal, if not excel, in this, as well as in other branches of abdominal surgery.

I beg your indulgence to the narration of the brief histories of two cases in which I operated—in one eight and in the other twelve months after conception.

In the first case the patient was aged 32, the mother of three children. Her periods had been regular for several years. After missing two months she had all the symptoms of tubal rupture, and was dangerously ill for several weeks. After recovery her abdomen began to enlarge upon the same side, and continued to grow for five months. She had some of the symptoms of pregnancy, but no one thought in the country where she lived that she really was with child. Seven months from the first missed period she began to fail in health, and was treated for malaria and subsequently typhoid fever followed by peritonitis. She came to Alexandria for better treatment and came under the care of Drs. Jones and O'Brian, who requested me to see her in March last, after discovering an abdominal tumor.

I found an invalid, pale and emaciated, with a pulse of 130 and a temperature 96° in the morning and 104° in the afternoon, with night sweats, frequent chills, no appetite and unable to walk out of the house.

She had a well-defined tumor in her left side, which we all believed to be undergoing suppuration and to be the cause of all her troubles. She was thoroughly septic. No one made a positive diagnosis, but all agreed that an operation afforded the best chance of recovery. The usual preparations were made and the abdomen opened in a relative's house in Alexandria.

Most extensive adhesions were encountered in all directions. A fluctuating point in the tumor was tapped and a quart or more of the offensive gray-colored fluid came away. In proceeding with enucleation of the tumor my fingers tore into the sac and a child's foot and leg protruded. The opening was enlarged and a macerating and decomposing eight months' fœtus was easily removed with the placenta. The specimen is now preserved in the Army Medical Museum. It was found to be impossible to cleanse the sloughing sac and stitch it to the abdominal wall, as I wished to do, as it tore open in several places and putrilege was freely admitted to the abdominal cavity. Much time was spent in separating dense adhesions from the bladder, uterus and ligament. The abdominal cavity was finally made clean and the wound closed with a glass drainage tube left in. The patient never rallied and died on the next day. I believe now, if a correct diagnosis had been made and the sac incised, the fœtus and placenta rapidly removed, and the sac well stitched to the peritoneum, cleansed and packed with gauze, the patient would have recovered.

Case II.—Mrs. B., aged 36, mother of two children, the youngest 11 years of age, menstruated in the latter part of March, 1892. Early in

May, while at the house of a friend, she was suddenly seized with violent pains in the hypogastric region, passing backward to the rectum. A physician was summoned who gave a hypodermic of morphia and made hot application to the abdomen and perineum. One month later there was a similar attack. There had been no appearance of the menses. On examination, the physician found a large mass between the vagina and rectum which was very sensitive to the touch and which he thought to be a tumor. She informed the physician that she thought she might be pregnant, but in this view he did not concur. Several attacks of less severity occurred at intervals of about three weeks. Early in August movements of the fœtus were felt, and this, of course, established the existence of pregnancy.

In the latter part of November there was said to be an escape of liquor amnii. On the fifth of December about a pint escaped, and there was evidence of the onset of labor. After this date no signs of fœtal life were manifested. On the twenty-third of January it was determined to bring on labor, and a gum catheter was introduced *ten* inches and permitted to remain thirty-six hours, when another was substituted for a similar period without provoking uterine contractions. After consultation the patient was etherized and the cervix dilated until the smallest sized Barnes' bag could be introduced, but beyond this nothing larger could be inserted. *The doctor* said he introduced his finger into the dilated uterus and felt the child.

No labor followed these efforts, and the lady decided to come to Washington, where I saw her, February 23, at her father's house. External examination of the abdomen revealed the fœtus lying in an oblique position, the larger and lower extremity being in the right iliac fossa, the smaller to the left and above the iliac crest. Internal examination detected cervix apparently corrugated in a longitudinal direction. The patient was kept under observation, and March 16 she called at my office for further examination. Her pulse had ranged for weeks from 90 in the morning to 120 in the afternoon. Through the speculum I passed a sound two inches, but could not make it pass further. March 21, Dr. F. C. Smith was called in consultation with Dr. Joseph Tabor Johnson.

The existence of intra-uterine pregnancy was doubted until the physician who had had charge of the case stated that he had actually felt the child *in utero* when he introduced his finger after the dilation with Barnes' bag.

Dr. Johnson thought, notwithstanding the history given by the Nova Scotia physicians, where Mrs. B. resided, that the case was one of abdominal pregnancy, and Dr. S. C. Busey was added to the consultation. He could not decide whether the fœtus was inside the uterus or not. With two fingers against the cervix it was felt to move when the tumor was pushed about with the other hand applied externally. The patient was now twelve months pregnant.

She came to my private hospital April 6, 1893, and was anæsthetized on the following day and the uterus demonstrated to be empty and of normal size. I familiarized myself as much as possible with the tumor

and its environment. A week later I opened the abdomen in the presence of Drs. Adams, Bowen, Smith, Fry and Stone. The omentum was adherent to the tumor, but easily separated. Passing my hand down into the right iliac fossa, I found to my delight that the mass was not adherent, and immediately lifted the bulk of the tumor out of the abdomen. The uterus and right ovary, tube and broad ligament were free. The fœtus had developed in the left tube until rupture, and then in folds of the left broad ligament. From underneath the unbroken gestation sac was enucleated and rolled out on the table; only one vessel needed ligation. Much of the ligament was trimmed off and ligated close to the uterus. No cleansing of the cavity required and no drainage tube. Abdomen quickly closed and patient put to bed in half an hour.

She sat up on the twenty-first day and went home on May 18, one month from the date of her operation, and recent letters report her perfectly well. She lives near Halifax, where her husband is the American Consul.

Upon opening the specimen it was found free of amniotic fluid, and contained a full term fœtus with its placenta and membranes, which is preserved in the Army Medical Museum in this city.